ARTICLES & REPORTS

PRODUCTION OF COLOUR PVC RINGS FOR THE CAPE GANNET AND THE CAPE CORMORANT

F.Kriel and E. O'Niel

The Sea Fisheries Institute has colour and metal-ringed 7 500 Cape Gannet *Morus capensis* and 5 300 Cape Cormorant *Phalacrocorax capensis* chicks during 1978-1981, to study the migration and breeding patterns of the different year classes in relation to the availability of pelagic fish. Each island and year class from which the bird was taken has its own colour combination to facilitate identification in the field. Owing to the longevity of gannets and cormorants, durable colour rings are needed. "Darvic" PVC was used to produce the rings as it is easy to cut and has a high resistance to ultra-violet light. Rings that have been in use for two years have shown no colour fading.

Ring blanks with rounded ends of 120 mm x 12 mm x 1 mm for gannets and 95 mm x 8 mm x 1 mm for cormorants are cut from 1,8 m x 1,2 m x 1 mm sheets of "Darvic" PVC by a local engineering company and the moulds are milled from 19 mm "Tuffnyl" (Fig. 1 overleaf). "Darvic" PVC is not readily available locally.

The double overlap rings are made by inserting the ring blanks into the tangential slits and jamming them against the curve of the mould. The loaded mould is then immersed in hot water (>90°C), the blanks soften within seconds and are fed into the mould with a pair of tweezers. The inner end of the ring is then pushed back against the direction of the curve, assuring the correct internal diameter (16 mm for gannets and 12,5 mm for cormorants) and preventing the inner end from protruding into the centre of the ring. The mould with the rings is placed in cold water to cool while the operation is repeated with a second mould. A single operator working an average 8-hour day can make 1 000+ rings in this manner.

F. Kriel and E. O'Niel, Sea Fisheries Institute, Private Bag X2, Roggebaai, CAPE TOWN, 8012

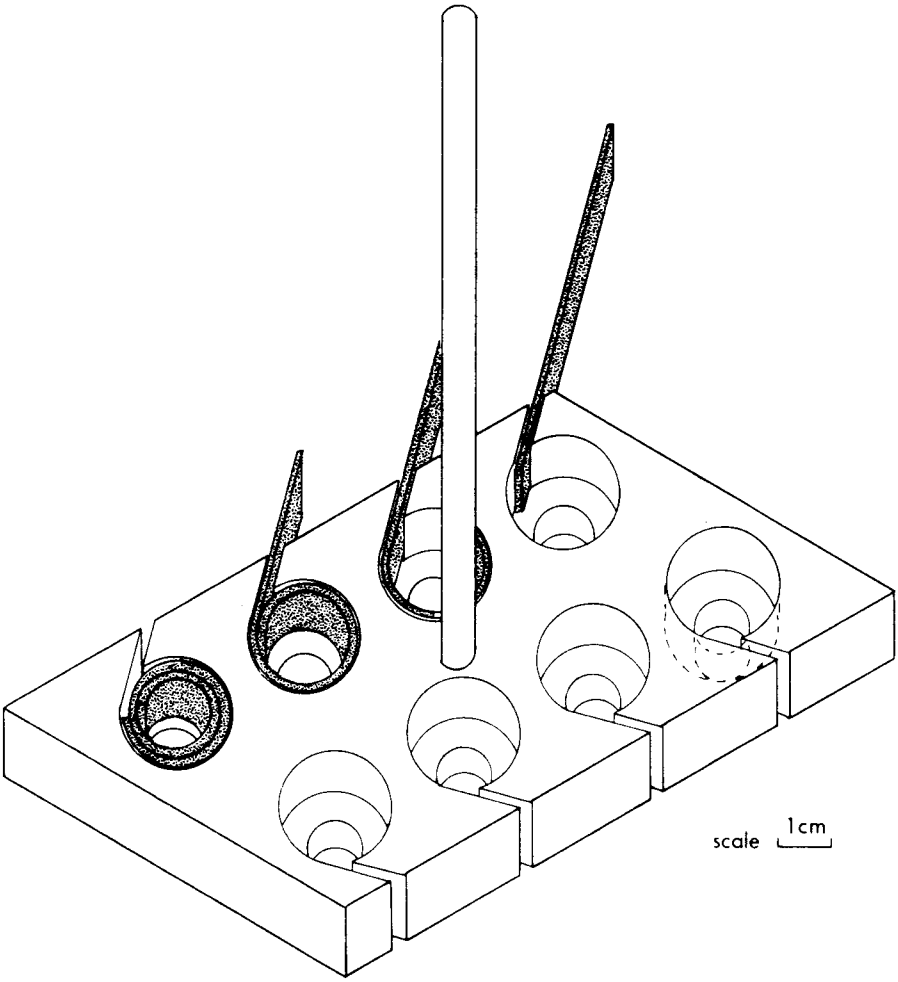

FIGURE 1

Diagram of "Tuffnyl" mould with ring blanks shown in various stages of insertion via the tangential slots from right to left.